



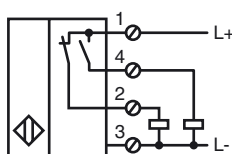
**Model Number**

NBB15-U4-A2-T

**Features**

- Temperature range -25 ... 100 °C (-13 ... 212 °F)
- 15 mm flush
- 4 LEDs indicator for 360° visibility

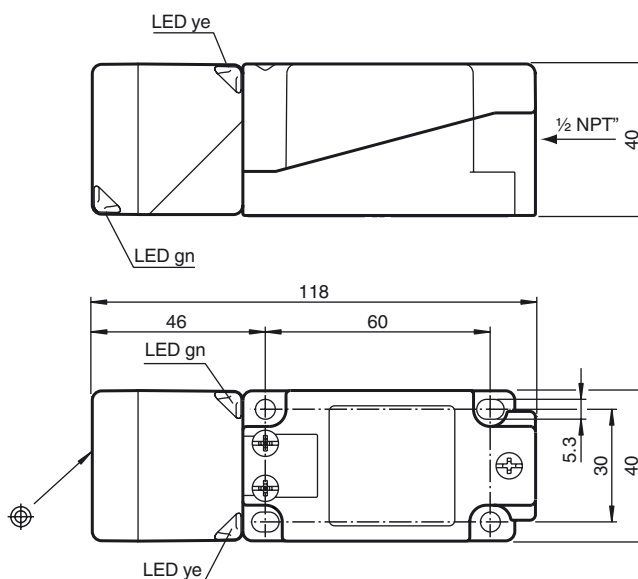
**Connection**



**Accessories**

MHW 01  
Modular mounting bracket

**Dimensions**



**Technical Data**

General specifications			
Switching element function		PNP	NO/NC
Rated operating distance	$s_n$	15 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 12.15 mm	
Reduction factor $r_{AI}$		0.35	
Reduction factor $r_{Cu}$		0.3	
Reduction factor $r_{304}$		0.75	
Nominal ratings			
Operating voltage	$U_B$	10 ... 30 V	
Switching frequency	$f$	0 ... 300 Hz	
Hysteresis	$H$	typ. 5 %	
Reverse polarity protected		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	$U_d$	$\leq 2$ V	
Operating current	$I_L$	0 ... 200 mA	
Off-state current	$I_r$	0 ... 0.5 mA	
No-load supply current	$I_o$	$\leq 20$ mA	
Operating voltage display		LED, green	
Indication of the switching state		LED, yellow	
Functional safety related parameters			
MTTF <sub>d</sub>		1480 a	
Mission Time ( $T_M$ )		20 a	
Diagnostic Coverage (DC)		0 %	
Ambient conditions			
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)	
Mechanical specifications			
Connection type		screw terminals	
Core cross-section		$\leq 2.5$ mm <sup>2</sup>	
Housing material		PA / LCP	
Sensing face		PA	
Housing base		metal	
Protection degree		IP68 / IP69K	
Mass		225 g	
Note		Tightening torque: 1.8 Nm (housing) Tightening torque: 1.0 Nm (Screw terminal)	
Compliance with standards and directives			
Standard conformity		EN 60947-5-2:2007 IEC 60947-5-2:2007	
Approvals and certificates			
UL approval		cULus Listed, General Purpose	
CSA approval		cCSAus Listed, General Purpose	
CCC approval		Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.	

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